

Meeting of 1999-4-6 Special Meeting

MINUTES
SPECIAL CALLED MEETING
LAWTON CITY COUNCIL
APRIL 6, 1999 - 5:30 P.M.
WAYNE GILLEY CITY HALL COUNCIL CHAMBER

Mayor Cecil E. Powell, Also Present:
Presiding Bill Baker, City Manager
 John Vincent, City Attorney
 Brenda Smith, City Clerk
 Lt. Col. Jeff Ewing, Fort Sill Liaison

The meeting was called to order at 5:30 p.m. by Mayor Powell. Notice of meeting and agenda were posted on the City Hall notice board as required by State Law.

ROLL CALL

PRESENT: G. Wayne Smith, Ward One
 Richard Williams, Ward Two
 Jeff Sadler, Ward Three
 John Purcell, Ward Four
 Robert Shanklin, Ward Five
 Charles Beller, Ward Six
 Stanley Haywood, Ward Seven
 Randy Warren, Ward Eight

ABSENT: None.

Baker introduced Gary Jackson, Assistant City Manager, and he was welcomed to the City.

BUSINESS ITEM:

1. Receive a presentation from the Corps of Engineers on the Meadowbrook Creek Local Flood Protection Project and select an alternative for completion of the study. Exhibits: Location Map.

Jerry Ihler, Public Works/Engineering Director, said the City has been in a joint venture with the Corps of Engineers in a feasibility study which began September 1997, with anticipated completion in the spring of 1999. A decision is needed on which of these five alternatives to pursue. He introduced Gene Lilly, Project Manager, from the Corps of Engineers.

Lilly said detention structures and channel improvements have been evaluated; one alternative is to take no action and four other alternatives are provided regarding channel improvements. A matrix was developed and had been provided to Council showing alternatives and comparisons to allow for a decision to be made that would be best for the community and allow the Corps to submit that plan for approval.

Lilly said the feasibility study cost share agreement was approved in August 1997; the study team identified potential solutions for the flooding problems and presentations were made to the public in April and in August 1998. Following the August meeting, there was a need to identify additional alternatives because of public concerns regarding the removal of trees. Two additional alternatives were identified, those being Plans 8 and 9 in the matrix. There is a need for selection of the best alternative that meets the needs of the community at this point. The Corps would then complete the feasibility study, request approval of that feasibility study, and subject to that approval, initiate plans and specifications, and subject to further approval, execute a project cooperation agreement, acquire real estate and construct the project.

Preliminary proposed schedule to complete the activities is proposed for the feasibility study to be completed by February 2000; then initiate plans and specifications in March 2000; submit plans and specifications for approval and request construction approval to initiate the project cooperation agreement in December 2000; after execution of the project cooperation agreement, there is a year scheduled for real estate acquisition, followed by approximately four months for the competitive bid contracting process, which would put construction beginning in April 2002.

Lilly said from the Corps of Engineers perspective, the plans presented on the matrix all meet the benefit cost criteria and

they are prepared to take the plan the City prefers and forward it with a request for approval. He said he could not guarantee that it would be approved, but that would be his intent, and following that approval, the Corps would initiate plans and specifications, followed by execution of the project cooperation agreement, real estate acquisition and then construction.

Baker asked what constitutes the delay between the time plans and specifications are prepared until construction could begin in April 2002. Lilly said plans and specifications take approximately nine months, and one month is scheduled to execute a project cooperation agreement after the completion of plans and specifications, and a year is scheduled for real estate acquisition, and the competitive bidding process takes four months.

Purcell asked if all five of the plans assume that the B-1 reservoir is operational. Lilly said yes. Purcell asked if any of the dollar figures shown on the matrix include costs for the B-1 reservoir. Lilly said the dollar figures are for the channel improvements, not for B-1.

Beller asked if \$3 million had been set aside and if that included the cost of the B-1 reservoir and if that was included in these costs. Lilly said it is not included in the costs on the matrix. Beller asked if there was a cost estimate on the B-1 reservoir. Ihler said when the \$3 million was earmarked, \$1.5 million was earmarked for the joint project with the Corps and \$1.5 million for the B-1 reservoir. Ihler said he anticipated the cost for the B-1 reservoir to be \$1.7 to \$1.8 million. Beller said there may be a shortage and Ihler said, depending on the alternative selected, there could be a shortage in both.

Jim Leach, hydraulic engineer with the Corps of Engineers on this study, said he developed the information that determines the amount of flow and the flood depths. He presented a slide showing the drainage area for the Meadowbrook Creek addition, and pointed out various reference points. Photo images and contour data was provided by the City in many instances. Existing 100 year flood plain for Meadowbrook Creek was pointed out on a slide, as well as the homes that are subject to the 100 year flood; four homes were incorrectly identified as they are on a small hill. 57 homes are in the existing 100 year flood plain and 52 are in the 10 year flood plain. The existing conditions represent the first alternative of taking no action.

Leach said Plan Four is a grass lined channel starting near the golf course, proceeding up through Meadowbrook Creek to a small antique store. It has a 55 foot bottom width, trapezoidal shaped channel that is grass lined with a small concrete section in the middle that would be approximately seven foot wide or ten foot wide to allow for maintenance vehicles.

Replacement of the Meadowbrook Drive bridge and the 51st Street bridge would be required to accommodate the new channel width. Eight homes would have to be purchased and removed to allow for construction of the channel. He presented a slide showing how this plan would affect the flood plain, and five homes would still be in the 100 year flood plain; three would remain in the 10 year flood plain just south of the Meadowbrook Drive bridge. Plan Four would provide a small amount of flood reduction at a certain point, but as it moved upstream, the channel modification would take hold and by the time it gets to Meadowbrook, there is a large amount of flood reduction. There would be approximately 3-1/2 feet of flood reduction at the Meadowbrook Drive bridge and about 5-1/2 feet of flood reduction at the 51st Street bridge.

Leach said Plan Six is the first plan they investigated. It consists of a grass lined channel with a 65 foot bottom width in certain areas and a 55 foot bottom width for the remainder. It begins at the mouth and goes all the way through at Cache Road. With this plan, the same eight homes would have to be purchased and relocated. The Meadowbrook Drive bridge and 51st Street bridge would be replaced. There would be a three to one vertical side slope on the channel and the top width varies between 90-120 feet wide. He said the cross sections remain the same for the plans. Leach said the existing 100 year flood plain would be contained within the channel, as well as the 10 year flood plain. A slide showed the existing conditions for 100 year and 10 year flood plains, and the result of the proposed improvements. Plan Six would have no homes remaining in either the 100 year or 10 year flood plain. The 100 year flood would be reduced by 5-1/2 feet at Meadowbrook Drive, and at 51st Street it would be reduced by 6-1/2 feet in depth.

Leach said Plan Eight is very similar to Plan Four, except no channel work would be conducted between Meadowbrook Drive and a little east of 51st Street. The Meadowbrook Drive bridge would not be replaced, but the 51st Street bridge would be replaced. 45 homes would remain in the 100 year flood plain with Plan Eight, and five homes would remain in the 10 year flood plain. Channel work would begin to the north, no work would be done for a certain distance, and channel modification would resume at 51st Street. There will be three feet of flood reduction on the downstream side of Meadowbrook Drive for the 100 year flood, and about 2-1/2 feet of flood reduction in another vicinity.

Leach said Plan Nine is the same as Plan Eight except nothing would be done on the downstream portion, and the only channel improvement would be from the 51st Street bridge to the antique store. The 51st Street bridge would be replaced and the same eight homes would have to be purchased and removed. Reduction in flood plains were shown on a slide. 51 homes would remain in the 100 year flood plain and 42 homes would remain in the 10 year flood plain. There would be no reduction in flooding in a certain area, upstream at 51st Street there would be a 1.3 feet reduction in the 100 year flood.

Leach presented a slide to show how the various channel plans compare with the existing conditions.

Shanklin asked if the Corps studied the area at 44th and Gore and to the south. Leach said no, they took the existing flood plain conditions for Wolf Creek where the east, middle and west branches come together, although they do have the existing conditions for Gore. Shanklin said he had felt for a great number of years that the area caused problems. He said 44th and Gore had 100 feet of bridge 12 foot deep, 1,200 foot boxes, and if water is running five foot deep you have 500

square feet of water going south down stream. It goes onto State land and there is an ox bow, trees, and a fence under the trestle, although it may have been removed, but when it gets to 38th and Lee, it may be a 100 foot bridge but at five foot, the way it is sloped, only 275 feet of water can get through there. He said he could not believe that those conditions did not cause water to backup further up stream.

Leach said that is a commonly asked question because most people think the slope of the stream may be flat enough that it would cause a back water effect. He said the slope of Meadowbrook Creek is sufficiently steep enough in terms of hydraulic capacity that the effects from the main stem of Wolf Creek play out about mid-way through the golf course, so there is sufficient slope on Meadowbrook Creek that Meadowbrook Creek itself takes control with the high elevations. Shanklin asked if there is enough elevation fall that will not affect it. Leach said yes, for the 100 year flood; there could be problems with a 500 year flood, but there is quite a bit of drop as it flows through the golf course.

Shanklin asked if the figures showed 20 foot of fall or 20 foot of water. Leach said there is ten foot of fall from where the channel work would begin down to where Meadowbrook Creek dumps into the main stem of Wolf Creek. Leach said if they were to build the full channel from where Meadowbrook Creek runs into the main branch, because of the significant drop as it gets close to the main branch, they would have to build a drop structure to keep from having erosive conditions at the end; there is a lot of fall based on the contour information. Shanklin said it shows almost ten feet of fall in a 1,000 feet area and asked if that was correct. Leach said about 7-1/2 feet, yes, and 9 feet of fall in 2,000 feet.

Mayor Powell said this was not advertised as a public hearing and asked that Council agree to receive comment due to the large attendance at the meeting. Council agreed.

Earl Barton, 810 NW 50th Street, said he had lived there for 30 years and when Meadowbrook Creek was flooding, he would walk there through his back gate and down the sidewalk adjacent to the creek to see how bad the flood was, and much of it is coming from 53rd, 49th, 48th and through that area into a small channel. He said if he could walk adjacent to the creek to see the flooding, it would show that the flooding was from more than just the creek. Barton said he would like to know what the alternatives would do for that problem.

Leach said the plan does not address local drainage problems, such as if there is a street that is carrying a lot of water and people have difficulty in that regard, this plan does not specifically address those problems. There will be inlets into the channel at various locations for water that is coming in from the sides to properly get within the channel, but there will still be flood problems in low areas and on some streets that this project will not fix. The main purpose of this project is to carry the flood waters that are coming primarily from the large, upstream area of the drainage basin down through Meadowbrook Creek. There will still be some local drainage problems that the project will not address, although they would provide access for the water as best they could off of the little side areas, but it will not solve everything.

Kay Terrill, 811 NW 51st Street, said she had lived at that address for 32 years. She asked when was the last time barriers were used to block off Meadowbrook Drive and that she and her husband had observed that the water seemed to be flowing better, possibly because it had been cleaned out. Terrill said the barriers had been up two or three times a year in the past, but it may have been a year since they had been put up recently.

Terrill asked Leach to put up the slide showing Plan Four. She asked where the water coming down the channel goes when it gets to a certain point and said it would come swooshing down the channel. She said it does not go anywhere but the country club and they had never understood where the water was going and that the slide did not tell them either.

Terrill asked Leach to put up the slide showing Plan Eight and asked if he said there would be no flood reduction between Meadowbrook and 51st Street. Leach said there would be some reduction but there would be no channel construction in that area. Terrill said if Plan Eight were to be adopted, that would be acceptable because there is no flooding there anyway, and that the house Sadler currently lives in got water in it 20 years ago and that was the only time she knew of any house in that area getting water.

Terrill said the phrase channel modification indicated clearing out what is there now, which is beautiful, and replacing it with a ditch; she said channel modification reminded her of the phrase ethnic cleansing and that the phrase is completely deficient in indicating the damage that occurs and would occur in destroying their environment. She said we should call it what it is, and that is digging a ditch and destroying the environment.

Al Terrill, 811 NW 51st Street, asked in Plan Eight what would happen in the park area on 51st Street and if there would be a holding pond. Leach said at the lower end on Plan Eight, the modified channel will transition back to the natural channel, which is much narrower. He said bank protection, such as stone or rip rap, will be needed to prevent erosion; flood water will be squeezed down in Plan eight as shown for the 100 year flood plain when it gets to the lower end and the golf course; the modified channel will transition back into the natural channel.

Terrill said the plans call for purchase of homes and asked at whose expense that would be done. Lilly said land acquisition and utility relocation are parts of project implementation cost, which is shared by the Corps and the local sponsor, which would pay either 35% or 50% depending on the cost of the project, and in this case, Lawtons share would be 50%. Terrill asked how much had been identified for purchase of homes and the bridge replacement costs. Lilly said the lands and utility relocation preliminary estimates, depending on which plan is selected, would range between \$1.6 and \$3.3 million. Terrill asked if the Corps would participate in the cost of the bridge on 51st Street and response was that the costs would be shared and the bridge estimate was \$350,000 to \$500,000.

Sadler said some plans show Lawton and the Corps paying \$1.4 million each and asked if that included the purchase of the homes. Lilly said Lawtons share is 50% and a large part of this is the land and buildings.

Ted Lechner, 808 NW 50th Street, asked for the slide showing the aerial view of the area and asked if any of the plans went even mid-way into the golf course. Leach said Plan Six is from the mouth up to Cache Road; Plans Four and Eight start and then end at an antique store; Plan Six goes all the way through the golf course and it would contain all of the 100 year flood and straighten the channel and reduce flood depths more for the lower section, but provide no benefit for the area upstream. Lechner said the computer model shows that houses along Meadowbrook, such as Mr. Underwoods house, would not flood in the 100 year flood. Leach said that was correct, the east side of the creek and south of Meadowbrook would not flood in a 100 year flood but five homes would still be in the flood plain.

Lechner asked if Plan Six was much more expensive. Leach said it is more expensive due in part to the greens and tee boxes through the golf course. Lechner said the model did not account for collateral drainage coming in from the side streets and asked if the plan would accommodate that water. Leach said he took into account the total amount of water that would be running off of this total area but did not count the amount of water coming in from each little street. Lechner asked if there could be so much side drainage that the program conclusions are thrown into doubt. Leach said no, the amount of flow coming in from the drainage area north of Cache Road is much more than would be contributed by this one area south of Cache Road. Lechner suggested that purchase of the houses alone might be sufficient.

Purcell said the information shows that under Plan Six no homes would remain in the 10 year or 100 year flood plain and asked if those who own the homes now who are required or have the option to buy flood insurance would be relieved of that responsibility if they were outside the flood plain. Ihler said yes. Beller asked if that would still be a flood plain area. Ihler said the 100 year flood plain would be carried within the channel and a Letter of Map Revision would be required for submission to FEMA to update the maps to show the current conditions resulting from the improvements.

Mary Burrell, 5114 NW Liberty, expressed concern about the water on the smaller side streets and asked why assistance could not be provided to relieve that situation. Leach said this project is to modify the main channel itself for the drainage basin, and some relief may be provided for local streets due to the inlets that will be provided into the channel but that it would not completely solve that problem. Leach said the bridge at 51st Street would be replaced with a wider and taller structure. Mayor Powell said Plans Four and Six call for replacement of both bridges, and Plans Eight and Nine call for replacement of only the bridge on 51st Street.

Bill Malone, 4632 Meadowbrook, said he had lived at that address for 33 years and served as the President of the Lawton Flood Association of Meadowbrook. He said Flood stands for Frequent Loss Of Our Domain. He said he had lived in the area since 1966 when there were three to five houses there. Malone said the City Engineers had told him it was against the ordinance to defer water over more than three neighbors houses, and they had no problem with flooding until Memorial Day weekend in 1979, so someone is not detaining water as the City Code says. He said the Flood Members would like to see Plan Six from the mouth of the Meadowbrook Creek to Cache Road, the full channel. No homes would be in the 10 or 100 year flood plain for the money spent.

Malone said he and his wife put their house up for sale in July 1998. A reputable appraiser established the price at \$250,000 for the 3,500 square foot home, and they asked \$245,000 because they knew it was in a flood area. Generals, Colonels, and several business people looked at it and were very interested until they found out about the flooding problems. The price has been reduced to \$190,000 and no one has made an offer so it is obvious what this situation does to the property values in the area. He asked how many houses, businesses, car lots, and apartments have been built west of 46th Street since 1966 with water now running into this small creek. Malone said the Flood Association requested the Council, as the elected officials, to vote for Plan Six and to vote from the heart, and not because of politics. He said 60-70% of the neighbors in the area were on fixed incomes and flood insurance costs from \$400 to \$600 a year; the Flood Association recommends Plan Six as the best plan for the dollar spent, and if not, they would like to ask for Plan Four which would leave only five homes in the 100 year flood plain.

Malone said the Flood Association understands that most of the CIP money had been set aside for this project, and the CIP election is coming up in 1999. He said all he had heard from City officials was that the residents should have known better than to have bought in that area. The City and Corps of Engineers have spent a lot of time and money to solve the Citys problems in this area. He said Lawton has made progress and is a nice place and that he and his wife had been in business here for 43 years and plan to retire here. Malone asked that the CIP money be put to work and used for what it was voted in for, and that the flooding has been going on for 20 years. He asked what the elected officials planned to do for Meadowbrook Addition.

Burl Boyce, 4630 NW Meadowbrook, said everyone is asking where the water goes when it gets below Meadowbrook bridge and that the answer to that question is that it goes in the back of his house. He said the reason for that is when the creek fills up completely, there is no place for the water to get out of the area because it hangs up and then backs up. Boyce said if you build a creek or channel that will do the job, it will stop the problems, plus you will be able to have more development and help everyone in the City be able to make money, taxes and help the City grow.

Rick Herbert, 1110 NW 51st Street, said Malone mentioned what would be the best plan for the dollars spent, and that is Plan Six where the water would go all the way through to the new channel. He said the area south of the Meadowbrook bridge had already been widened, and rip rap is in place along the bank, and that he did not know if that would continue

north to Cache Road. Herbert said every tree that is taken out would be replaced according to the information provided, and that trees would be on the slopes, although the trees would not be 300 years old. He said this is not a giant concrete ditch, and it would look pretty good and be similar to those in Oklahoma City and Wichita Falls. Herbert said most people have fences and they are not looking right into the creek.

Herbert said Plan Four is a partial option and would cost \$2.1 million. He said the bars and graphs were fine but that most people would not understand seeing a red bar run across a blue bar, but the bottom line in Plan Four is that you would spend \$2.1 million and that included everything that would be done, and you would only have five homes that would remain in the 100 year flood plain. Herbert said you can forget the 10 year or 100 year flood plain or 11 inches of rain per year, because there is a flood if three inches of rain is received in 30 minutes. He said the problem is so much water coming into this area at one time. Herbert said those living on Liberty Street have told him that when the creek gets up, their water backs up. He said he felt if the creek were widened, the water would not build up and the street drainage would flow into it.

Herbert said if you go from Plan Four to Plan Six, it is \$900,000 but you are talking about 57 homes that are paying flood insurance. Herbert said Plan Six shows that no homes would remain in the 100 year flood plain and the water would be in the ditch. He said Lawton is growing all the time and restaurants do not come to a town that is dying, and they are coming in all over the place and Fort Sill is not getting smaller. Herbert said if no improvements are made on the middle section of the channel, the water could get higher near those houses. He said if this is going to be done, it should be done right. Herbert said the residents inherited the sewer problem and that this flooding problem should be solved because the City is growing and more houses will be built to the west and the area near Rogers Lane will be developed and more water would be running off. Herbert said the City should be commended for going ahead with this because he knew there were people who did not want anything done. He said the money is earmarked to fix the problem and Lawton could pay \$3 million to get a \$6 million project, and 57 people would not be paying flood insurance, and that he personally pays \$700 a year and it is based on the size of your home. Herbert said it should be done all the way and finished and not just do it half way and get the most you can for your money.

Shanklin said he would like to clarify that the Council identified the funds and that it was not shown on the ballot for the 1995 CIP as an individual project to the voters. He said Council was trying to help solve this problem but the \$3 million that may be spent was not shown on the ballot and it was set aside as a possibility. Shanklin said it was in error to say the City was not spending the money as it said it would do. He said there may have been more projects in the past than there was funding available to do, but that he wanted to clarify that point.

Johnny Wilson, 7218 Dogwood, said he was the head golf professional at the Lawton Country Club. He said when the water goes down, it goes all over the country club property and debris could be found after a hard rain. He said Plan Four would appear to be dumping more water on the country club. Wilson said Plan Four includes funding for two greens, Plan Six includes four greens to include tee boxes and bridges. He said they take a lot of the water that comes through.

Williams asked Wilson the preference of the country club in regard to this problem. Wilson said they want to be put back like they are, and when this started, they were closed down to fix some greens and wanted to do something then but that was two years ago. Williams asked if the country club would be receptive to one of the plans shown on the list. Wilson said the board of directors would have to answer that.

Shanklin asked if the water from 82nd Street may be as much of a problem as the water coming from Meadowbrook. Wilson said the aerial shows the lay out and that you can tell the next day at the golf course that the water came through by the debris that is left there, and the water comes out of the creek and crosses the golf course.

Shanklin asked if we had ever modeled the detention reservoir that was going to be built on Fort Sill. Leach said Tulsa modeled both B-1 and B-2, as well as an alternative showing a detention pond on Fort Sill but since it is such a large, uncontrolled area, adding two more ponds does not do much, dollar for dollar, in this area and you would not notice much flood protection from it.

Beller said a footnote says that Plan Eight was generally accepted by those attending a workshop and asked if this was the same alternative that was presented to that group. Lilly said yes.

Purcell asked the City Attorney if the City could assess part of the cost to the people that are benefiting from this. Vincent said for streets, sewer lines and water lines, the City can create improvements districts but would have to research whether that included drainage. Purcell said they seemed to be talking about everyone wanting Plan Six. The Mayor asked for order. Purcell said for whatever plan is desired, and obviously Plan Six was not widely acceptable, but funds are needed for any of the plans and for B-1 reservoir. Purcell said Plan Six shows no homes in the flood plain so there would be no requirement for them to pay flood insurance, so there would be a savings there and asked if there could be an adjustment where the residents would be no worse off than they are now but the flooding would not be a problem.

Shanklin said if he lived there, he would want to maintain that insurance because there could still be a possibility of a 200 year flood, and because this is all shown on models and had not been constructed or tested.

Anthony Cominos, 812 NW 50th Street, said he had lived in Meadowbrook since 1966 and had never been flooded. He said he was late in arriving and knew nothing about any of the plans but that he objected to all of them on the basis that he had lived in Meadowbrook all of these years. Cominos said he did not care what the Council voted on because they would do

whatever they wanted to do anyway and that was the way it had always worked and he was not trying to offend anyone. He said regardless of which plan was approved, he would continue to carry flood insurance and that he paid over \$800 per year for it because there might be one time that he could be flooded. Cominos said there had been quite a few thunderstorms and rain events in the past few months and would like to know when the last flooding was, and some cleaning had been done in the area, and asked when the last time was that anyone had been flooded in that area. He said he had heard of none and had seen a dramatic change in the flow of the creek since the mouth had been opened a little bit down stream. Cominos said he would like to see a plan to work on the country club first since that seems to be the biggest bottleneck. He asked how many inches of rain there had been since the last flooding and the result, and said there had been some progress. Cominos said he did not want to see a ditch behind his house or replace 300 year old trees with one year saplings.

Sheila Pedigo, 1109 NW 52nd Street, said that many comments had been made tonight to confuse the issue and what it comes down to is homes versus trees. She asked Council to look at the repetitive flooding in Meadowbrook and to initiate a positive action to benefit those who are adversely affected by the flooding, a potential killer. Pedigo said all of the streets in Meadowbrook flood much too often; when homes flood, the families are exposed to electrical hazards, the possibility of a gas explosion, contamination of sewage and the threat of snake bites. She said few people realize the force of storm water when it leaves the banks of a small, meandering creek known as the middle branch, and affects properties, homes and streets. The risk of drowning is also a major concern. Pedigo said in the event of a medical emergency, they would be denied access because there is no way an emergency vehicle can get to their homes when they flood, and this service should never be denied to anyone.

Pedigo said she was told in 1995 by FEMA in Washington, D.C. and also by the State Attorney General that it is the responsibility of the local government to handle the mitigation of storm water in the community. She said flooding brings misery and hardship and carries a financial burden. Pedigo asked that either Plan Four or Six be approved, and nothing less. She said the houses that are flooding are their homes and investments.

Mayor Powell called for a conclusion to public comment and thanked those who participated.

Williams asked staff how much longer it would be before the B-1 detention pond could be in operation. Ihler said Triad Engineering is finishing the final design and he hoped that construction could begin late this summer or early fall. Williams asked a time frame for construction and Ihler said possibly a 180 day construction contract.

Purcell said he needed an explanation of what the residents of the area would like to see done.

Warren said all of the plans, except the one for no action, call for the removal of between 155 and 400 trees. He said he would not let trees stand between people having a home that flooded and having a home that did not flood. Warren said trees meant nothing to him in that equation, and trees would be lost in any of the plans although new trees would be provided, which would not satisfy everyone, but that Council should accept that fact.

Sadler said he thought a pretty good consensus had been reached at the meeting at the Library in January, and that a petition had been submitted by many citizens supporting Plan Eight in writing. He said the no action alternative should not be selected after everything that has been done. Sadler said Plan Nine calls for no reduction in flooding at Meadowbrook bridge, which is not acceptable, and that leaves Plans Four, Six or Eight. He said there is a difference in cost and in trees, the trees being saved are between the bridges in an area that does not typically flood now and those are the ones he would like to try to protect. Sadler said eight homes would be removed and the trees next to them may be removed also, but if no one is living there, then people are not as concerned about those trees. He said he was stunned to hear people from Flood talking about Plans Four and Six after all of the discussions that were previously held. Sadler said he had represented Ward 3 for two years and had never been invited to a Flood meeting, but when you talk to them personally, they are not in favor of removing 150 year old trees either.

Sadler said \$3 million was earmarked, but \$1.5 million of that will be spent on the B-1 detention pond, and that leaves about enough money to do Plan Eight for the \$1.7 million required. He said he would like to leave out work on the middle section of the channel, do the work to the north and south of the two bridges and then do a serious clean up, which can be done through the \$1 on the utility bill that is used for drainage work. Sadler said Plan Eight seemed to be coming together as the plan that the residents could agree on as an acceptable solution.

Warren said Ward 8 is on top of the ridge line and does not have to worry about the water itself, but will have to worry about paying to fix this problem because they would be paying their share just like anyone else. He said he did not see how \$1.7 million could be spent to save 13 homes and that he would much rather spend \$3 million to save 57 homes.

Beller asked if these alternatives are guaranteed to work. He said a group talked about water retention this afternoon, and if this structure is built, the water would have to be dumped on someone and that he did not know who that would be. Beller said the upstream detention ponds may solve the problem. He said he had gone down 51st Street and Liberty and drove through deep water, which meant it was not coming from the north but it was coming from the west. Beller said the Council cannot fix anything this evening, and no guarantee can be provided that any of these programs would be a solution, so he felt the detention structure should be built before proceeding further and see the result of that effort.

Shanklin said the 1999 CIP will be presented to the public when a determination is made on the City's water system. He said the south plant produced 10 mgd and may no longer be able to treat that water. Shanklin said if that capacity is

replaced by a southeast plant, the cost may be \$10 million, along with another \$10 million for the lines to get it back into town to replace what was lost. He said the north plant could possibly be expanded to 35 mgd and we treated that amount almost daily last summer. Shanklin said the 1999 CIP may all be tied up for the water, not even counting replacing all of the lines that have had breaks in them during this past year, or for anything else. He said Lawton is at 70 mils, which is the lowest in the State, and no one wants to compare Lawton to Norman or Edmond, but Edmond is at 128 mils, although many Lawton residents would have difficulty affording more. Shanklin said we are at that crossroad and at that dilemma but that he did not know if there would be any money available.

Williams asked if it would take a year to develop plans and specifications to correct this problem from the time a Council decision is made. Lilly said after the feasibility study is approved, it would be nine months to do the plans. Williams asked if Council selected an option tonight, would the feasibility study come back to the Council after it was developed for the next step in the project. Lilly said they would want to submit a feasibility study using the plan the community would support and the plan would need to be approved by the Corps higher authority, and if that is approved, the Corps would be funded for the plans, and following that, at that point, they would request construction approval from headquarters, then request the City to enter into a project agreement, then go through real estate acquisition and construction. Williams asked if the City had a financial obligation before that point. Lilly said the City's share is 50% of the feasibility study and after the first \$100,000, the remaining is a 50-50% cost share.

Williams said he could not see doing the project half way and that there was merit to Beller's comments because the B-1 pond might solve the problem. He said he would rather wait to see if the B-1 would do that.

Mayor Powell asked if there is a time table with the Corps in regard to being able to wait and see if the B-1 project works well enough to not require the additional work. Lilly said if Council selected the no action plan, the Corps would need to stop the feasibility study, and it could possibly pick back up in the future, but if there is a significant delay, they would need to do a final accounting and start over again. Mayor Powell said they were wondering if the B-1 project would be enough. Lilly said that was addressed in their calculations. Leach said the flood plain that was shown was considering that the B-1 project was in place, and that they could not guarantee the exact figures on the project but they could guarantee a reduction in flooding.

Purcell said all of the plans assume the B-1 project is built, which is a \$1.7 million cost. He said on Plan Eight, we go from 52 homes to five in the 10 year flood plain, which is fairly significant, but we only drop about 12 homes on the 100 year flood plain. Purcell asked when the last 100 year flood that impacted on Meadowbrook occurred. Ihler said he was not aware of a time on that particular watershed, although there had been two on the East Cache Creek basin in the last 15 years. Purcell said all of the flooding problems that have occurred in that area are based on the 10 year flood, or something in between, so if Plan Eight is done, we take 47 homes out of the flood area that anyone has experienced for quite some time. He said Plan Eight was agreed to by 33 people at one point in time, and under that, 47 of the homes that have been flooding in less than 10 year floods are assisted, although it only reduces the 100 year flood homes by 12 homes.

Shanklin asked if the City had spent about \$400,000 on this feasibility study. Ihler said \$150,000.

Haywood asked for Ihler's recommendation. Ihler said from a purely engineering standpoint, without the emotion for homes flooding or trees being removed, through the process of elimination looking at the cost and benefit of each alternative, he would not consider the no action plan or Plan Nine as being cost effective, which leaves the other three alternatives. Ihler said when you look at 45 homes remaining in the flood plain on Plan Eight for a cost of \$1.7 million, where for only \$400,000 more you can go to Plan Four, from a staff standpoint, Plan Four seems to be the one that is most cost effective and makes the most sense and has the least effect on the golf course and removes the most homes from the flood plain on a dollar cost basis. Ihler said from an engineering standpoint, Plan Four seems to be the most cost effective and it would be recommended.

Beller asked if the 7-1/2 foot elevation drop is 300 feet into the golf course property. Leach said 7-1/2 feet is from the beginning of Meadowbrook channel more toward the main channel. Beller asked what happens to the water after it goes through the country club property and if it is sent down stream faster, could there be a worse problem. Leach said there is a very short transition zone; there would be the same volume of water going down the stream and rip rap would be used in a small area where the velocity would be higher. Leach said once the water is out of the channel, it will go where it has always gone.

Mayor Powell asked if the City had the money to fund this project. Baker said no, we have \$3 million earmarked and \$1.5 of that is obligated to the B-1 project so there would be a shortfall, although it would not be extreme.

Williams asked the Corps if the B-1 project was not factored into the flood calculations, would there be a significant difference. Leach said they looked at it with B-1 and without it, and if B-1 is not built, the existing 100 year flood would be one foot deeper and as you go further upstream, it has a greater effect. Leach said you will still have flood damage below B-1 that you will not have if you do build it so it depends on where you want to realize your benefits.

Purcell asked the Corps representatives which plan they felt was best from a cost benefit ratio from their perspective. Lilly said Plans Four and Eight probably have the greatest benefit.

MOVED by Sadler, to select Plan Eight for this project.

Sadler said while we still have homes in the 100 year flood plain as a result of this plan, he could not see that everyone

would be able to just stop buying flood insurance even if they got to zero because there is still a potential in being that close to the creek. He said going from 52 homes to five homes is a significant impact. Sadler said we do not have the money to do Plan Six and they had to fight long and hard to get the \$3 million for the B-1 project and this one, and it would be difficult enough to do this. He said he felt funding could be located for Plan Eight and that a major clean up is needed in the middle section and not just leave it untouched.

Warren asked what the effect on Meadowbrook would be if we did not do B-1 and we did Plan Six. Leach said for Plans Four, Six and Eight, leaving B-1 out, we would build the channel five feet wider for the same effect and it is not much of a cost difference.

Sadler said most of the homes that have difficulty getting ambulance service due to flooding would be removed under this plan. The audience disagreed and Sadler said he would withdraw that comment if that is not the case. Sadler said Plan Eight calls for work north and south of the middle section, keeps the massive trees that are so important to a lot of citizens, and all of the people who signed the petition and attended the workshop at the Library supported Plan Eight. He said he supported leaving the trees in place in that area.

SECOND by Smith to Sadlers motion.

Beller asked if funding is available for this option. Baker said it would be real close and probably could be found in the current CIP. Beller asked if this had to be done tonight and if Council was prepared to make this decision. Shanklin said until the funds could be identified and the CIP prepared to send to the voters, he felt action should not be taken.

SUBSTITUTE MOTION by Shanklin, that when we present the CIP and have public input, to consider it then and table it until that time.

Purcell said he would not support one cent coming from the next CIP to do this; there are funds in the 1995 CIP and \$3 million is already earmarked. He said the funds can be found from 1995 CIP and that he would go on record as not supporting any money from the next CIP for this project. Shanklin asked why. Purcell said there are problems with sewer, water and water distribution. Shanklin said you would not get their help unless you give a little bit to everybody and Purcell said they are getting \$3 million plus.

Baker said we do have approximately \$1.5 million to go toward this project. If the cost is \$1.7 million, there is a \$200,000 shortage. He said the CIP he was referring to was the 1995 CIP, and not the proposed CIP.

Substitute Motion by Shanklin was withdrawn.

Beller asked the cost of the improvements to the country club. Ihler said the design is not done so there is not a cost breakdown; there is a rough cost estimate in each plan to take care of that. Beller asked if the \$1.7 million includes all the costs associated with the country club improvements, renovation, replacement, tee boxes, irrigation, and all of it, assuming they would be agreeable to the plan. Ihler said each cost estimate included the work that needed to be done for each plan, to include the golf course.

Ihler said we have spent \$150,000 on the feasibility study and that was from the \$1.5 million, so we actually have \$1.35 million remaining, and about \$350,000 would be needed if it costs \$1.7 million.

SUBSTITUTE MOTION by Warren, SECOND by Williams, to stop the B-1 Project and apply all those funds remaining to Plan Six with the modification that would be needed to keep the levels at the same place as the plan shows now, with the widening of the extra five feet.

Warren said in lieu of building B-1, they would widen the channel an additional five feet to take up the difference. He said that would not change the flooding north of Meadowbrook, but that was not what was set out to fix to begin with. Warren said the purpose was to stop the flooding in Meadowbrook, and this is a way to get it accomplished.

Williams said if the sole purpose is to alleviate flooding in Meadowbrook, the B-1 does not accomplish that, and the cost for B-1 is \$1.7 million. He said plans and specifications are nearing completion, although there should be a good amount of funds left over that could be used for channel work in Plan Six.

Sadler said he thought abandoning the B-1 reservoir would be a big mistake because the land has been purchased and the plans are underway. He said he thought B-1 would be beneficial and should be pursued.

Purcell said he agreed with Sadler and felt the decision on B-1 should not be changed. He said he understood B-1 would help Meadowbrook and the City is a long way down the road toward getting that done and others may come forward with flooding problems that could have been helped by B-1.

Haywood asked Ihler for comment about the B-1 detention. Warren said it was not his intent to sell the land where the B-1 would be located and that B-1 is needed, but it may not have to be done right now because both projects cannot be funded at the same time, B-1 and Plan Six, but Plan Six can be done and then proceed with B-1 later on because it does not solve this problem at this time.

Ihler said all of the numbers provided in the Corps study, including the numbers shown on the homes, would be different if B-1 is not done. Warren asked if that would be true even with the five foot wider channel. Ihler said there had not been a close study about doing away with the detention pond and the Triad study on B-1 showed a flow reduction of 20-25% through that area. Ihler said staff recommendation is to do both projects, and he understood there was a problem with funding, but we are very close to proceeding with B-1 and it could be in place by the spring rains and provide benefit.

VOTE ON SUBSTITUTE MOTION: AYE: Williams, Warren. NAY: Sadler, Purcell, Shanklin, Beller, Haywood, Smith. SUBSTITUTE MOTION FAILED.

VOTE ON ORIGINAL MOTION: AYE: Sadler, Purcell, Shanklin, Beller, Haywood, Smith, Williams. NAY: Warren. MOTION CARRIED.

There was no further business to consider and the meeting adjourned at 7:40 p.m. upon motion, second and roll call vote.